REMARKS

The Office Action dated September 13, 2005 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 11, 12, 17, 18, 28, 29, and 31 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added and no new issues are raised which require further consideration or search. Claims 1-33 are currently pending in the application and are respectfully submitted for consideration.

Claims 11-26 and 28-33 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 11, 12, 28, 29, and 31 have been amended such that they are now in independent form including all of the limitations of the base claim and any intervening claims. Claims 13-26, 30 and 32-33 are dependent upon claims 11, 12, 29, and 31, respectively. Thus, all of claims 11-26 and 28-33 are in condition for allowance.

In the Office Action, claims 1-10 and 27 were rejected under 35 U.S.C. §102(e) as being anticipated by Headrick (U.S. Patent No. 5,724,358). The rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 2-26 are dependent, recites a network switch comprising at least one port data port interface, a first memory, a second memory, and a memory management unit. The memory management unit is in connection with the at least one data port interface, the first memory, and the second memory. The memory management unit receives data from the at least one data port interface, determines if the data is to be stored in one of the first memory or the second memory, stores the data in one of the first memory or the second memory as a linked list, retrieves the data from one of the first memory or the second memory, and forwards the data for egress.

Claim 27, upon which claims 28-33 are dependent, recites a method for storing data in a network switch. The method includes the steps of receiving the data to be transmitted to an egress at an input to a memory management unit, formatting the data received as a linked list, determining if the data is to be stored in a first memory or a second memory, and storing the data in the first memory or the second memory based on the determining step.

As will be discussed below, Headrick fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

Headrick discloses a high speed packet-switched digital switch that has a switch with a shared memory architecture. The switch may have a memory controller including an output queue for each output port. Each output queue includes a plurality of priority level sub-queues for routing data packets having different priority levels. The memory controller routes and buffers data packets on a per port, per priority level basis. The data

packet has a header portion identifying one output port destination and a level of priority of the data within the packet. A buffer, shared by the output ports, stores the data packet in a selected buffer location based on the output port destination and priority level of the data packet. The data packets are output to the output ports in priority order.

Claims 1 and 27 include the limitation that the memory management unit receives data and determines whether the data is to be stored in a first memory or a second memory. Applicants respectfully submit that Headrick fails to disclose or suggest such a limitation. The Office Action, in the response to arguments section, states that Headrick reads on the limitation of the present claims because it discloses "a memory buffer in the cell buffer memory of element 126 pointed to by Pointer Memory 178 is determined to be used by the Buffer Manager to store data cells for ports 0-7, and a memory buffer in the cell buffer memory of element 126 pointed to by Pointer Memory 180 is determined to be used by the Buffer Manager to store data cells for ports 8-15" (Office Action, page 9, lines 12-15). Therefore, the Office Action concludes that cells which are destined for one of ports 0-7 or 8-15 will be stored in the cell buffer memory pointed to by the respective pointer memory. Applicants respectfully disagree and maintain that Headrick fails to disclose or suggest a memory management unit which receives data and determines whether the data is to be stored in a first memory or a second memory, as recited in claims 1 and 27.

Headrick discloses a first memory manager which process cells for ports 0-7 and a second memory manager which processes cells for ports 8-15. The number of memory

managers may be increased or decreased depending upon the number of input ports for the particular switch (Headrick, Column 7, lines 1-6). Therefore, Headrick discloses distinct and separate memory managers for each group of ports. In addition, Headrick discloses that each memory manager has a dedicated pointer memory unit associated with it (Headrick, Column 7, lines 25-27 and Fig. 7).

Thus, according to Headrick, incoming ATM cells for ports 0-7 are processed by a first memory manager, while incoming cells for ports 8-15 are processed by the second memory manager. The memory managers do not make a determination regarding which memory the cell is to be stored in. Rather, each memory manager has a pointer memory unit associated with it and the cell will be stored in that memory unit. Consequently, according to the system described in Headrick, the memory manager does not need to make a determination regarding which memory the data is to be stored in. As a result, Applicants respectfully submit that Headrick fails to disclose or suggest a memory management unit which receives data and determines whether the data is to be stored in a first memory or a second memory, as recited in claims 1 and 27. For at least the reasons discussed above, Applicants respectfully request that the rejection of claims 1 and 27 as being anticipated by Headrick be withdrawn.

Claims 2-10 are dependent upon claim 1. Therefore, Applicants respectfully submit that claims 2-10 should be allowed for at least their dependence upon claim 1, and for the specific limitations recited therein.

Applicants respectfully submit that Headrick fails to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-33 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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